

GOLD STANDARD PASSPORT

GOLD STANDARD PASSPORT

CONTENTS



- A. Project title
- B. Project description
- C. Proof of project eligibility
- D. Unique Project Identification
- E. Outcome stakeholder consultation process
- F. Outcome sustainability assessment
- G. Sustainability monitoring plan



- H. Additionality and conservativeness deviations



- Annex 1 ODA declarations

GOLD STANDARD PASSPORT

Version of Document: 1.0

Date of Document: 10 October 2011

SECTION A. Project Title

Energy Efficient Cook Stoves for Siaya Communities, Kenya

SECTION B. Project description

The project aims to construct energy efficient cook stoves for rural communities in the Siaya County in Nyanza Province, Kenya.

As in many rural regions in developing countries the supply of modern energy carriers such as electricity and fossil fuels is very limited and expensive. In Siaya County only 1.4% of the population use electricity for lighting and only 0.1% for cooking purpose. To meet their basic energy needs households rely on locally available biomass fuels such as firewood and also occasionally charcoal: almost 90% of households use firewood for cooking and 9% use charcoal for preparing their meals. Households in Siaya County traditionally cook on open fires consisting of 3 stones, in this way burning large amounts of fuel wood in a very inefficient way. This has severe impacts at the social (e.g. health) and environmental levels (e.g. deforestation, CO₂-emissions). This project aims to mitigate these impacts by introducing energy efficient cook stoves to Siaya communities in Kenya.



Children collecting fuelwood



Baseline cook stove: 3-stone fire

The efficient cook stove is a biomass rocket stove designed for burning wood and consisting of two cooking units that can be separately fired. The stove is fixed and installed in households. This efficient cook stove brings multiple benefits to the stove users: it reduces firewood consumption by approximately 40-50%, thus reducing the burden of firewood collection on women and children or relieving the household's budget for fuel purchase; moreover, through the cleaner and more efficient combustion harmful smoke emissions are reduced and indoor air quality is considerably improved; the reduction in firewood consumption helps to conserve forest vegetation and to reduce CO₂-emissions, which are responsible for climate change.

GOLD STANDARD PASSPORT



Project cook stove: fix installed efficient rocket stove

The efficient cook stoves are constructed using locally available materials, such as mud, bricks and sawdust. Local artisans are identified in the villages and trained in stove construction and household mobilization. An innovative village based group savings and loaning approach will be integrated to enhance affordability and access to efficient cook stoves through soft loans. Moreover, regular energy education and demonstrations will be conducted to enhance awareness, adoption and utility.

The project is developed by the Swiss non-profit foundation myclimate (Zurich, Switzerland) and is coordinated and implemented by the Kenyan Tembea Youth Centre for Sustainable Development (Ugunja, Kenya).

Estimated start date of construction:

Project implementation started in October 2010 with the construction of the first efficient stove on 04 October 2010.






GOLD STANDARD PASSPORT

SECTION C. Proof of project eligibility

C.1. Scale of the Project

[See Toolkit 1.2.a]

Please tick where applicable:

Project Type	Large	Small
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	x	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

	<input type="checkbox"/>
---	--------------------------

C.2. Host Country

Kenya, which is a developing country that has ratified the Kyoto protocol and listed as a Non-Annex I country with no cap on GHG emissions.

GOLD STANDARD PASSPORT

C.3. Project Type

[See Toolkit 1.2.c and Toolkit Annex C]

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does your project activity classify as an End-use Energy Efficiency Improvement project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please justify the eligibility of your project activity:

The proposed project activity meets the Gold Standard eligibility criteria as follows:

The project is the distribution of efficient biomass cook stoves to rural households in Kenya, and therefore classifies as an End-use Energy Efficiency Improvement project.

The project surpasses the threshold of 180Gwh (thermal) for small-scale projects and thus the project classifies as a large scale.

The project is located in Kenya, which has ratified the Kyoto protocol and is listed as a Non-Annex I country with no cap on GHG emissions.

Transfer of credits ownership is guaranteed from stove user to project owner by the signed Stove Purchase and Sale Agreement and a VERPA between Tembea Youth Center for Sustainable Development and myclimate.

No ODA money is used to finance this project.

The proposed project activity has not been announced previously without mentioning that it will be conducted as a carbon offset project.

The project reduces CO₂, CH₄ and N₂O emissions by reducing the consumption of non-renewable firewood for cooking.

The project implementation did not start before the local stakeholder meeting and therefore the project classifies for the regular project cycle.

GOLD STANDARD PASSPORT

Pre Announcement	Yes	No
Was your project previously announced?	<input type="checkbox"/>	x
<p>The proposed project activity has not been announced previously without mentioning that it will be conducted as a carbon offset project. Please see the project decision timeline below for clarification.</p> <p>Project decision timeline:</p> <ul style="list-style-type: none"> • MoU between Tembea and MyClimate signed on 23 April 2009 • Term sheet between Tembea and MyClimate signed on 28 April 2010 • Local stakeholder meeting was conducted according to Gold Standard guidelines on 05 May 2010 • Stakeholder report uploaded to Gold Standard registry on 18 June 2010 • Project listed in Gold Standard registry on 15 July 2010 • Project implementation started in October 2010 		

GOLD STANDARD PASSPORT

C.4. Greenhouse gas

[See Toolkit 1.2.d]

Greenhouse Gas	
Carbon dioxide	x
Methane	x
Nitrous oxide	x

C.5. Project Registration Type

[See Toolkit 1.2.f]

Project Registration Type	
Regular	x

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (eg: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Retroactive, please indicate Start Date of Construction dd/mm/yyyy: _____

GOLD STANDARD PASSPORT

SECTION D. Unique project identification

D.1. GPS-coordinates of project location

[See Toolkit 1.6]

	Coordinates
Latitude	00° 10' 59.88" N
Longitude	34° 17' 59.99" W



Explain given coordinates

The energy efficient cook stoves will be constructed in the rural communities in the Siaya County in the north of Nyanza Province in Kenya.

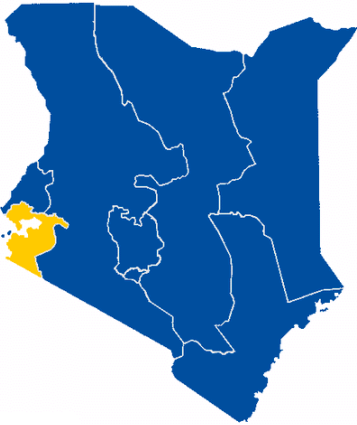
The given coordinates correspond to the office of the project owner Tembea Youth Centre for Sustainable Development P.O. Box 313, 40606, Ugunja, KENYA

D.2. Map



Map1: Location of Kenya in Africa

GOLD STANDARD PASSPORT



Map 2: Nyanza Province in Kenya



Map 3: Former Siaya and Bondo districts forming now Siaya County in Nyanza Province



Map 4: Siaya County and project location

GOLD STANDARD PASSPORT

SECTION E. Outcome stakeholder consultation process

E.1. Assessment of stakeholder comments

The local stakeholder consultation was held the 5th of May 2010 in Ugunja, Kenya. 57 people attended the meeting whereof more than 30 participants were local residents, Feedback forms with three questions were handed out and a total of 42 feedback forms returned by the participants. Generally the participants gave a positive feedback about the project. Especially the following benefits of the project were pointed out:

- The project considers the poor people
- Addresses present day environmental concerns like deforestation
- Addresses gender gaps
- Can lead to poverty reduction
- Can offer employment for the youth
- Addresses millennium development goals
- Addresses health issues

Table: Overview of 5 representative samples of filled out feedback forms

Participant Name	What is your impression of the meeting?	What do you like about the project?	What do you not like about the project?
Mary Mbenge	<ul style="list-style-type: none"> • Excellent and thanks for your invitation • As stakeholders from the Lake Victoria catchment we hope to do our best too! 	<ul style="list-style-type: none"> • Linking energy conservation to gender, MDGs, climate change • Starting at grassroots levels i.e. Anyiko sub location it will succeed!!keep it up Tembea 	<ul style="list-style-type: none"> • We should have a power point presentation (LCD) for pictorial presentations. Seeing is believing and pictorial presentation are never forgotten • Create more awareness • Organize for field trip • Train more women as TOTS (trainers of trainees) for success of the project
Mercy Nyakowa	<ul style="list-style-type: none"> • Wish it was done on every village level and schools. • It was too good to be for the few who attended • Hope attendants will disseminate the information 	<ul style="list-style-type: none"> • Good and timely project should be taken to all parts of the country 	
Lilian Amollo Oluoch	<ul style="list-style-type: none"> • I feel that the stakeholders should sensitize and mobilize 	<ul style="list-style-type: none"> • The project is really good because it is going 	<ul style="list-style-type: none"> • The only problem with the project especially this energy efficient

GOLD STANDARD PASSPORT

	the community on the benefits of the energy efficient cook stoves	to change the lives of many from poverty to better lives and also enable people to know the importance of natural resources	Jikos is just that it is expensive such that some other people might not afford
Richard Tony Ogolla	<ul style="list-style-type: none"> • I am impressed that the community resources persons e.g. <ul style="list-style-type: none"> ○ DO, youth leaders and others are involved directly. A clear indication that something constructive on environmental conservation will be done. 	<ul style="list-style-type: none"> • This project if implemented will save our world greatly in many ways: social, economic, environmentally etc. • It manipulates an act of man that will surely make a big change • The most innovative if implemented 	<ul style="list-style-type: none"> • Am not sure if women will actively participate as much as they are represented
Bianca Louisa Ochollah	<ul style="list-style-type: none"> • Educative and informative 	<ul style="list-style-type: none"> • It's a good initiative for conservation as well as meeting the MDGs 	<ul style="list-style-type: none"> • Enhance the adoption of the technology at a cost, even if it's in kind.

E.2. Stakeholder Feedback Round

Please describe report how the feedback round was organised, what the outcomes were and how you followed up on the feedback.

[See Toolkit 2.11]

The stakeholder feedback round still needs to be conducted.

Tembea youth centre for sustainable development intends to work with the stakeholders and other selected groups in disseminating report on local stakeholder meeting together with other project documentation. Immediately after the stakeholders meeting we shall develop the project data base, that will help us identify and maintain contacts of our partners as well as that developed during the stakeholders meeting. Using the contacts given or acquired and stored in our database we shall forward this report to the individuals

GOLD STANDARD PASSPORT

that can access internet. We shall also use contact persons in community disseminate the report for community reading and consideration. The community has a number of resource centres that attract the youth and young adults; we shall also drop copies here:

- Tembea Resource Centre and Library (At Tembea Offices).
- Rambula Community Library (under Kenya National Library Services – KNLS)
- Ukwala Community Library (under Kenya National Library Services – KNLS)
- Ugunja Community Resource Centre
- District Information and Documentation Centre (DIDC), Siaya
- District Commissioners' offices – Siaya, Gem, Ugenya and Ugunja.
- District Officers offices for the seven divisions (Karemo, Ugunja, Boro, Uranga, Yala, Wagai, and Ukwala)
- National Coordinating Agency for Population and Development (NCAPD) - Kisumu, Nyanza.
- NEMA office, Siaya, and Head office, Nairobi,
- UNDP/DBSC Siaya
- Ugenya Constituency office,
- Gem Constituency office
- Alego Usonga constituency
- Town Council of Ugunja
- Town Council of Ukwala
- Town Council of Yala
- County Council of Siaya
- OSIENALA
- CARE offices, Siaya

Of course, all people invited to the local stakeholder meeting will receive a digital or hard copy of the stakeholder report.

GOLD STANDARD PASSPORT

SECTION F. Outcome Sustainability assessment

F.1. 'Do no harm' Assessment

[See Toolkit 2.4.1 and Toolkit Annex H]

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
Human Rights			
1	<ul style="list-style-type: none"> The project does not introduce an entirely new concept that is far off the local culture. Cooking on the efficient cook stove is not much different from cooking on traditional 3-stone fireplace. Thus, no significant change in cultural practice shall occur. Through the stakeholders forum is it evident that it doesn't conflict the local communities values or practices. 	Low	Not needed
2	<ul style="list-style-type: none"> The project will not have any major impacts on the environment or land use patterns. The project will not result in temporal or permanent displacement of the local community. 	Low	Not needed
3	<ul style="list-style-type: none"> The local community's cultural set up will not be altered, damaged or removed/replaced as result of this project. The project is to provide the efficient cook stoves to replace the inefficient three-stone fire. 	Low	Not needed
Labour standards			
4	<ul style="list-style-type: none"> The project will provide employment for the local youth who will be involved in constructing the cook stoves. They will be subject to the freedoms and rights as provided by for the constitution of Kenya and other pieces of legislation. The project will not curtail any of these rights. 	Low	Not needed
5	<ul style="list-style-type: none"> This project will not at any stage use force or use any other means that will be 	Low	Not needed

GOLD STANDARD PASSPORT

	considered forceful to have people work in stove construction or buying.		
6	<ul style="list-style-type: none"> All workers are adults. No child labour is engaged for the construction of the stoves or for the preparation of any construction material needed. 	Low	Not needed
7	<ul style="list-style-type: none"> The project will at no stage be biased either towards a particular gender, religion or race. This is expressly noted in the organization operational procedures. 	Low	Not needed
8	<ul style="list-style-type: none"> No hazardous materials are used for the construction of the improved stoves. All materials are locally available. The construction does not involve any dangerous processes. 	Low	Not needed
Environmental protection			
9	<ul style="list-style-type: none"> The project activity does not involve planting or agricultural activities or the use of hazardous materials, or invasive species. The project promotes environmental protection. 	Low	Not needed
10	<ul style="list-style-type: none"> The project will not involve the conversion or degradation of natural habitats. The materials used for stove construction are locally available such as mud, burnt bricks; local people will be used to extract them. The project promotes habitat conservation through reduced fuel wood use. 	Low	Not needed

GOLD STANDARD PASSPORT

F.2. Sustainable Development matrix

[See Toolkit 2.4.2 and Toolkit Annex I]

Insert table in section C3 from your Stakeholder Consultation report (Sustainable Development matrix).

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development	If relevant, copy mitigation measure from 'Do No Harm' assessment, and include mitigation measure used to neutralise a score of '-'	Check www.undp.org/mdg and www.mdgmonitor.org Describe how your indicator is related to local MDG goals	Defined by project developer	<u>Negative impact:</u> score '-' in case negative impact is not fully mitigated, score '0' in case impact is planned to be fully mitigated <u>No change in impact:</u> score '0' <u>Positive impact:</u> score '+'
Air quality	n/a	MDG 4: Reduce child mortality MDG 5: Improve maternal health <u>Explanation</u> The efficient cook stove reduces smoke emissions from fire through cleaner burning process and decreased wood consumption through efficiency. The reduced indoor pollution will offer a chance to enhance the	<u>Indoor air quality:</u> Number of positive comments on indoor air quality improvement from households using efficient cook stoves. This indicator will be monitored using Monitoring Surveys.	+

GOLD STANDARD PASSPORT

		health of mothers and children who are mostly engaged in kitchen work. Thus promoting maternal health and reduced child mortality.		
Water quality and quantity	n/a	<p>MDG 7: Ensure environmental sustainability</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> Reduced tree cutting will have positive impact on reducing surface run off and enhancing the hydrological cycle of an area. The reduced tree cutting will mean reduced surface run off, which is important in enhancing underground water reserves by providing time for percolation. 	<p>Positive effect on water quality and quantity is difficult to attribute directly to project activity. This indicator is thus scored "0" and will not be monitored.</p>	0
Soil condition	n/a	<p>MDG 7: Ensure environmental sustainability</p> <p>MDG 1: Eradicate extreme poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The reduced cutting of trees will lead to reduced surface run off which subsequently reduces soil erosion, which robs off the top and fertile soils, in extremes this, can reduce farm productivity. This can enhance community well being due to reduced negative impacts on agricultural productivity, thus surpluses will be sold to provide income. 	<p>Improvement and conservation of soil condition is difficult to directly attribute to project activity. This indicator is thus scored "0" and will not be monitored.</p>	0
Other pollutants	n/a	MDG 7: Ensure environmental sustainability	No other pollutants are involved in project activity.	0

GOLD STANDARD PASSPORT

			No hazardous materials are used in the production of efficient cook stoves. Stoves are made with local bricks, mud, water, and sawdust. Construction is done onsite and the materials are sourced within the vicinity of the households/homes, with insignificant effect on the environment as these materials are drawn in small quantities.	
Biodiversity	n/a	<p>MDG 7: Ensure environmental sustainability MDG 1: Eradicate extreme poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The reduced tree cutting and destruction of habitats will ensure minimum impacts on the species richness in the local area. The minimum impacts on water quality and quantity will reduce disturbance in water body habitats. Maintain the species richness and natural environment of an area can be turned into income generation through the blending of ecotourism around such areas. 	<p>Positive influence of project activity on biodiversity is difficult to measure. Therefore, indicator is kept neutral and is not monitored.</p>	0

GOLD STANDARD PASSPORT

Quality of employment	n/a	<p>MDG 1: Reduce poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The project seeks to offer employment to the youth who are marginalized from the mainstream employment. This will raise their average income levels. It also seeks to provide trainings to the youth that will improve their capacity as artisans. Skills that they can use later in life or elsewhere. 	<p><u>Number of artisans trained and certified:</u> Copy of certification document for artisans trained.</p> <p><u>Number of artisans practicing:</u> Copies of contracts with artisans employed by the project.</p>	+
Livelihood of the poor	n/a	<p>MDG 1: Eradicate extreme poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> Households with improved cook stove will save time and money spent on fuel wood. This will relieve households' budgets. The livelihood of the locals will be greatly improved through, involvement in income earning activities, the integrated loaning and savings programme. This will provide skills and financial resources that will enhance community resilience to natural disasters and poverty. 	<p><u>Time and money savings due to reduced fuel consumption:</u></p> <p>Time and money spent on fuel per household per year compared to the baseline scenario. This indicator is monitored using the Monitoring Surveys and is compared to the values obtained in the baseline study</p> <p><u>Number of people in savings and loaning groups:</u></p> <ul style="list-style-type: none"> - to acquire efficient cook stoves - to access medical care, pay for school fees, and other social services. <p>Records from the savings and loaning groups are used to monitor these indicators.</p>	+

GOLD STANDARD PASSPORT

<p>Access to affordable and clean energy services</p>	<p>n/a</p>	<p>MDG 7: Ensure environmental sustainability MDG 1: Eradicate extreme poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> Less resource consumption on buying energy sources for cooking will provide for savings, allowing people to participate alternative businesses thus reducing poverty. The cook stoves that use less firewood will reduce the hardship put on women and young girls as they go fetching firewood long distances thus giving them chance to pursue education and others enhancing gender equity and empowerment. 	<p><u>Number of households using efficient cook stoves:</u> This indicator is continuously monitored and is available from the sales record.</p>	<p style="text-align: center;">+</p>
<p>Human and institutional capacity</p>	<p>n/a</p>	<p>MDG 1: Eradicate extreme poverty and hunger MDG 3: Promote gender equity and empowerment</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The opportunity availed by the project for people to be trained on stoves construction and their subsequent involvement in stove development, will be a means of income generation, which will lead to poverty eradication/reduction. The opportunity offered through trainings can contribute greatly to communities appreciating the link or importance taking children to schools as well as source of income to be used to 	<p><u>Number of people trained:</u></p> <ul style="list-style-type: none"> number of women and men trained for saving and loaning groups number of animators (women and men) trained for awareness creation and education <p>Participants list for different trainings conducted (type of trainings, dates of training, the number of trainees) are used for the monitoring.</p> <p><u>Number of people</u></p>	<p style="text-align: center;">+</p>

GOLD STANDARD PASSPORT

		<p>pay for fees and other necessitates</p> <ul style="list-style-type: none"> The opportunities provided for training will offer equal opportunity for women and men thus giving women a chance to engage in income generation activities which is vital in achieving gender equity and empowerment. 	<p><u>reached through awareness creation on efficient cook stoves and climate change.</u></p>	
Quantitative employment and income generation		<p>MDG 1: Eradicate extreme poverty and hunger</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The project will offer employment to the youth and sources of income, which will be used to enhance the economic well being of the community thus reducing incidences of poverty. The employment offered will be both in the office and that for artisans in the field. The indirect benefits from the project can have a positive impact on the HIV/AIDS prevalence rates in the region. Some of the reasons for high prevalence rates are poverty but with employment then incidences of sex for money can be considerably reduced. Improve maternal health, due to availability of income at the community and household levels, money can be available to support provision of medical facilities and medicines. 	<p><u>Number of people receiving income from project activity:</u></p> <p>Number of people employed e.g. data clerks, accountant, community mobilize, field officers, loaning and savings officers, quality assurance, monitors, stove construction.</p> <p>The project coordination will keep a record of the people directly employed by the projects and copies of their contracts.</p> <p>Project will provide employment to at least 15 staff (project manager, loaning and saving head, training coordinator and environmental expert), 5 artisan per community for 12 communities and at least 2 sub contracts awarded that will employ not less than 5 people each.</p>	+
Balance of payments and investment		n/a	Project does not involve this indicator	0

GOLD STANDARD PASSPORT

Technology transfer and technological self-reliance		<p>MDG 8: Develop a global partnership for development</p> <p><u>Explanation</u></p> <ul style="list-style-type: none"> The efficient cook stove is an improvement of an existing technology (biomass cook stove). Thus no real new technology is transferred to the project area. However, stoves can locally be produced and local capacities are built for construction of stoves. 	This indicator is kept neutral.	0
---	--	--	---------------------------------	---

SECTION G. Sustainability Monitoring Plan

[See Toolkit 2.4.3 and Toolkit Annex I]

Copy Table for each indicator

Justification choices, data source and provision of references

A justification paragraph and reference source is required for each indicator, regardless of score

Air quality	<p>Much of the world population, particularly in developing countries, still relies on firewood to meet basic energy needs. The resulting indoor air pollution can have severe health consequences, particularly for young children who spend considerable time in close proximity to the fire while their mothers cook.</p> <p>“Lack of access to clean, efficient, modern energy in the home can impact health in many ways. The most important direct health effects result from the air pollution caused by burning solid fuels, often indoors on open fires and simple stoves. [...] There is good evidence linking smoke from solid fuel use in developing countries with three important diseases—child pneumonia, chronic obstructive pulmonary disease (COPD), and lung cancer. Smoke from incomplete combustion of solid fuels contains many substances known to be toxic to human health through a variety of mechanisms. Among these pollutants, small particulate matter and carbon monoxide have been most commonly measured in homes using solid fuels.” (WHO & UNDP 2009, page 22).</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> World Bank report on the effects of indoor air pollution from cook stoves on health, 2003 http://siteresources.worldbank.org/INTPHAAG/Resources/AAGIAP9-03.pdf The Energy Access Situation in Developing Countries. A Review Focusing on the Least
-------------	---

GOLD STANDARD PASSPORT

	<p>Developed Countries and Sub-Saharan Africa. WHO & UNDP, November 2009: http://www.undp.org/energy/</p> <ul style="list-style-type: none"> - Gender and Equity in Bioenergy Access and Delivery in Kenya Study http://www.pisces.or.ke/pubs/pdfs/Gender%20and%20Equity%20in%20Bioenergy%20in%20Kenya.pdf - "Smoke – the Killer in the Kitchen": http://practicalaction.org/?id=smoke_report_home - General literature: http://www.hedon.info/category:improvedstoves - Specific on indoor air quality and health effects: http://www.hedon.info/1497/news.htm - Fuel Choice, Indoor Air Pollution, and Children's Health: http://econ.tulane.edu/RePEc/pdf/tul0803.pdf - Wood fuel: http://en.wikipedia.org/wiki/Wood_fuel - Indoor air pollution monitoring in Ghana: http://ceihd.org/images/stories/publications/Ghana%20final.pdf <p>Monitoring:</p> <ul style="list-style-type: none"> • Indoor air quality: Number of positive comments on indoor air quality improvement from households using efficient cook stoves. This indicator will be monitored using Kitchen Surveys.
<p>Water quality and quantity</p>	<p>Forests, trees and vegetation play an important role as water buffer. Deforestation reduces water storage capacity of land and has a bad impact on the natural water cycle. Reducing the demand for wood fuel decreases deforestation. This has positive effects on the water cycle (availability and quality): An intact vegetation cover preserves water resources in the ground and prevents soil erosion, which would lead to silting of water courses and bodies and affects the water retention capacity of the soil. Inefficient use of fuel wood is considered one of the important causes of deforestation. Depending on location, tree cutting can have the following impacts on the water bodies around it</p> <ol style="list-style-type: none"> 1. Increased sedimentation, nutrient loading 2. Increased stream temperature 3. Injury to fish, amphibian and other wildlife population 4. Water yield changes: 5. Increased high flows from storms and spring run-off 6. Decreased low flows in summer, negatively affecting riparian & aquatic habitat <p>Sources:</p> <ul style="list-style-type: none"> - "State of the World's Forests 2009". United Nations Food and Agriculture Organization: http://www.fao.org/docrep/011/i0350e/i0350e00.HTM, p. 74 - "Adoption of biomass improved cook stoves in a patriarchal society: an example from Sudan": http://sciencedirect.com¹ - Water quality and quantity effects from clear cutting: http://www.stopclearcuttingcalifornia.org/library/reports/waterquality.html - Effects of plantation forest harvesting on water quality and quantity: Canobolas State forest, NSW: http://www.csu.edu.au/research/ilws/news/events/5asm/docs/proceedings/Webb_Ashley_443.pdf - Water quality and quantity: http://www.extension.org/pages/Water_Quality_and_Quantity <p>Monitoring:</p> <ul style="list-style-type: none"> • The project's direct positive effect on this indicator is difficult to attribute. Thus, this indicator

¹ http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V78-47GY924-B&_user=10&_coverDate=05%2F20%2F2003&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_se archStrId=1475112800&_rerunOrigin=google&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=71a0edd37c81063e25 ce039c72385d3d&searchtype=a

GOLD STANDARD PASSPORT

	<p>is not monitored.</p>
<p>Soil condition</p>	<p>Harvesting wood and development and use of infrastructure (roads, skid trails, and landings) can expose soil, leading to soil erosion and runoff that can affect water quality and hydrological processes. Removing vegetation and litter during biomass harvesting for bioenergy can increase the risk of higher peak flows. It also allows more water to fall directly on the soil surface and infiltrate to groundwater, resulting in a higher water table that could lead to soil saturation and a loss of productivity. Reducing deforestation as a result of fuel wood savings prevents soil erosion and leaching. This ensures the fertility of the soil. The severity of human induced soil degradation in the Nyanza Province, Kenya is considered to be very severe:</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> - Forest Resources in Eritrea: http://www.fao.org/docrep/003/x6782E/X6782E02.htm - Wood Energy and Soil Productivity: http://www.extension.org/pages/Wood_Energy_and_Soil_Productivity - "State of the World's Forests 2009". United Nations Food and Agriculture: Organization: http://www.fao.org/docrep/011/i0350e/i0350e00.HTM. - http://www.fao.org/landandwater/agll/glasod/glasodmaps.jsp?search=Display+map+!&country=KEN <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • The project's direct positive effect on this indicator is difficult to attribute. Thus, this indicator is not monitored.
<p>Other pollutants</p>	<p>No other pollutants are involved in project activity.</p> <p>No hazardous materials are used in the production of efficient cook stoves. Stoves are made with local bricks, mud, water, and sawdust. Construction is done onsite and the materials are sourced within the vicinity of the households/homes, with insignificant effect on the environment as these materials are drawn in small quantities.</p> <p><u>Sources:</u></p> <p>N.A.</p> <p><u>Monitoring:</u></p> <p>N.A.</p>
<p>Biodiversity</p>	<p>Deforestation results in declines in biodiversity. The removal or destruction of areas of forest cover has resulted in a degraded environment with reduced biodiversity. Forests support biodiversity, providing habitat for wildlife; moreover, forests foster conservation. With forest biotopes being irreplaceable source of new drugs (such as taxol), deforestation can destroy genetic variations (such as crop resistance) irretrievably.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> - Tropical timber harvesting, biodiversity loss and environmental change: http://www.thedailystar.net/story.php?nid=18676 - "State of the World's Forests 2009". United Nations Food and Agriculture: Organization: http://www.fao.org/docrep/011/i0350e/i0350e00.HTM - Fuelwood/Building Material: http://rainforests.mongabay.com/0814.htm

GOLD STANDARD PASSPORT

	<p><u>Monitoring:</u></p> <ul style="list-style-type: none"> The project's direct positive effect on this indicator is difficult to attribute. Thus, this indicator is not monitored.
<p>Quality of employment</p>	<p>Kenya has an unemployment rate of 40%. The implementation of efficient cookstoves in the Siaya County in Nyanza Province will provide new jobs for the inhabitants.</p> <p>The project seeks to provide trainings to the youth and others that will improve their capacity as artisans. Skills that they can use later in life or elsewhere.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> Kenya economic overview: https://www.cia.gov/library/publications/the-world-factbook/geos/ke.html Copy of certification document for artisans trained will be provided. Copies of contracts with artisans employed by the project. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> Number of artisans trained and certified: Copy of certification document for artisans trained. Number of artisans practicing: Copies of contracts with artisans employed by the project.
<p>Livelihood of the poor</p>	<p>In Siaya County over 90% of rural households and over 80% of urban households use wood fuel as a source of energy and the demand of wood is high and continues to rise (SDDP 2008-2012, p. 25). The reduction in firewood required for cooking will result in less expenditure on cooking fuel. As a result of providing fuel efficient stoves access to clean and affordable energy services will be improved considerably.</p> <p>Overall poverty level of the district stands at 40%, however with great geographical differences; in some areas there are poverty indices of more than 70% (SDDP 2008-2012, p. 54). The causes of poverty in this area are diverse and include among others low income among households to afford farm inputs, over-reliance on traditional methods of farming and lack of alternative sources of income. Almost 90% of the population are engaged in agricultural activities or are self-engaged (SDDP 2008-2012, p. 37).</p> <p>Siaya County has a very high incidence of HIV/AIDS estimated at 24%. The doctor/population ration is at 1:52,000 and high cost of health care services and health care financing is mentioned among major concerns in the health sector (SDDP 2008-2012, p. 28 & 54). The livelihood of the locals will be greatly improved through the involvement in income earning activities and the integrated loaning and savings programme, which will provide skills and financial resources that will enhance community resilience to natural disasters and poverty.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> Siaya District Development Plan (SDDP) 2008-2012, OFFICE OF THE PRIME MINISTER MINISTRY OF STATE FOR PLANNING, NATIONAL DEVELOPMENT AND VISION 2030, pp. 25, 28, 34-42, 54. New Global Alliance Embraces Efficient Cooking Stoves: http://www.wfp.org/stories/new-global-alliance-embraces-clean-cooking-stoves

GOLD STANDARD PASSPORT

	<ul style="list-style-type: none"> - Gender and Equity in Bioenergy Access and Delivery in Kenya: http://www.pisces.or.ke/pubs/pdfs/Gender%20and%20Equity%20in%20Bioenergy%20in%20Kenya.pdf - UNDP joins major Africa drive: http://www.capitalfm.co.ke/news/Kenyanews/UNEP-joins-major-Africa-drive-9882.html <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • <u>Time and money savings due to reduced fuel consumption:</u> Time and money spent on fuel per household per year compared to the baseline scenario. • <u>Number of people in savings and loaning groups:</u> <ul style="list-style-type: none"> - to acquire efficient cook stoves - to access medical care, pay for school fees, and other social services.
<p>Access to affordable and clean energy services</p>	<p>The reduction in firewood required for cooking will result in cleaner combustion and in less expenditure on cooking fuel. As a result of providing fuel efficient stoves access to clean and affordable energy services will be improved considerably.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> - Ingwe A (2007) Rocket Mud Stoves in Kenya. Boiling Point No 53, 2007. http://www.hedon.info/docs/BP53-Ingwe-3.pdf <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • Number of households using efficient cook stoves. • This indicator is continuously monitored and is available from the sales record.
<p>Human and institutional capacity</p>	<p>The opportunity availed by the project for people to be trained on stoves construction and their subsequent involvement in stove development, will be a means of income generation, which will lead to poverty eradication/reduction.</p> <p>The opportunity offered through trainings can contribute greatly to communities appreciating the link or importance of taking children to schools as well as source of income to be used to pay for fees and other necessitates.</p> <p>The opportunities provided for training will offer equal opportunity for women and men thus giving women a chance to engage in income generation activities which is vital in achieving gender equity and empowerment.</p> <p>Environmental training, knowledge dissemination, stove building process will include teaching families about the benefits of the fuel efficiency and how to make the most of the technology in their homes, as well as raising environmental awareness on issues to do with deforestation, climate change, respiratory health.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> - Records from different types of trainings. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> • Number of people trained: <ul style="list-style-type: none"> - number of women and men trained for saving and loaning groups - number of animators (women and men) trained for awareness creation and education

GOLD STANDARD PASSPORT

	<ul style="list-style-type: none"> Number of people reached through awareness creation on efficient cook stoves and climate change.
<p>Quantitative employment and income generation</p>	<p>The project will provide employment to the locals in different activities such as efficient stove construction, raw material production, maintenance, data clerks, accountant, community mobilize, field officers, loaning and savings officers, quality assurance.</p> <p>Project will provide employment to at least 15 staff (project manager, loaning and saving head, training coordinator and environmental expert), 5 artisan per community for 12 communities and at least 2 sub contracts awarded that will employ not less than 5 people each.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> The project coordination will keep a record of the people directly employed by the projects and copies of their contracts. <p><u>Monitoring:</u></p> <ul style="list-style-type: none"> Number of people receiving income from project activity.
<p>Balance of payments and investment</p>	<p>The project will utilize locally available materials and skills as well as lead to the development of that expertise locally. This will reduce dependence on foreign or outside acquired materials or skills.</p> <p><u>Sources:</u> N.A.</p> <p><u>Monitoring:</u> N.A.</p>
<p>Technology transfer and technological self-reliance</p>	<p>The use of the traditional three stones cooking stoves is widespread in the project area. The traditional three stone cooking stoves are considered cheap and easy to assemble and that for a long time has made it common despite of its inefficiency. The proposed project stoves are new and blend both indigenous and modern technology. The new modern technology is borrowed; its adoption will lead to technology transfer and domestication. The training and employment in the efficient stove development will lead to a level of self reliance in the community which contributes to sustainable development.</p> <p><u>Sources:</u></p> <ul style="list-style-type: none"> Household Energy Network, Boiling Point No 17, http://www.hedon.info/BP17:SupplyOfMetalForJikos Ingwe A (2007) Rocket Mud Stoves in Kenya. Boiling Point No 53, 2007. http://www.hedon.info/docs/BP53-Ingwe-3.pdf <p><u>Monitoring:</u> N.A.</p>

GOLD STANDARD PASSPORT

No	1	
Indicator	Air quality	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		
Chosen parameter	# of positive comments from stove users	
Current situation of parameter	Energy efficient cook stoves will reduce fuel wood smoke through cleaner burning and decreased fuel wood burning through efficiency. This should lead to positive comments by stove owners about indoor air quality and perhaps fewer cases of respiratory-related problems at local dispensaries.	
Estimation of baseline situation of parameter	N.A.	
Future target for parameter	All new stove users give positive comments about indoor air quality from those who cook with Tembea stove over baseline stove.	
Way of monitoring	How	Household interviews for Monitoring Survey
	When	Annually 1 year after registration
	By who	Research/Monitoring Coordinator Tembea

No	2	
Indicator	Quality of employment	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		
Chosen parameter	<ul style="list-style-type: none"> - Number of artisans trained and certified: Copy of certification document for artisans trained. - Number of artisans practicing: Copies of contracts with artisans employed by the project. 	
Current situation of parameter	N.A.	
Estimation of baseline situation of parameter	N.A.	
Future target for parameter	60: Number of artisan trained and practicing by the project	
Way of monitoring	How	Record keeping of artisans trained & practicing
	When	Annually
	By who	Research/Monitoring Coordinator and Project Manager Tembea

No	3	
Indicator	Livelihood of the poor	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		

GOLD STANDARD PASSPORT

Chosen parameter		<ul style="list-style-type: none"> - <u>Time and money savings due to reduced fuel consumption:</u> Time and money spent on fuel per household per year compared to the baseline scenario. - <u>Number of people in savings and loaning groups:</u> <ul style="list-style-type: none"> - to acquire efficient cook stoves - to access medical care, pay for school fees, and other social services.
Current situation of parameter		N.A.
Estimation of baseline situation of parameter		<u>Time and money spent on fuel:</u> The BS estimated an expenditure of KES 10972 on fuel per year and 431 hours used in fuel gathering per year for the baseline scenario. <u>Number of people in savings and loaning groups:</u> None
Future target for parameter		<u>Time and money spent on fuel:</u> Based on PS expenditure on fuel are estimated at KES 5486 per year and time used in fuel gathering is estimated to be 215 hours for the project scenario. <u>Number of people in savings and loaning groups:</u> Per year approximately 300 CSL groups established with 4,500 persons targeted.
Way of monitoring	How	Household interviews for Monitoring Survey Record keeping of savings and loaning groups
	When	Annually
	By who	Research/Monitoring Coordinator Tembea

No	4	
Indicator	Access to affordable and clean energy services	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		
Chosen parameter	- Number of households using efficient cook stoves.	
Current situation of parameter	Households use 3-stone fire for cooking	
Estimation of baseline situation of parameter	N.A.	
Future target for parameter	See A.2. for forecasted number of efficient stoves constructed over a period of 7 years.	
Way of monitoring	How	Sales record
	When	Annually

GOLD STANDARD PASSPORT

	By who	Research/Monitoring Coordinator and Project Manager Tembea
--	--------	---

No	5	
Indicator	Human/institutional capacity	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		
Chosen parameter	<ul style="list-style-type: none"> - Number of people trained: <ul style="list-style-type: none"> - number of women and men trained for saving and loaning groups (CSL) - number of animators (women and men) trained for awareness creation and education - Number of people reached through awareness creation on efficient cook stoves and climate change. 	
Current situation of parameter	N.A.	
Estimation of baseline situation of parameter	N.A.	
Future target for parameter	Approx. 4,500 persons trained for CSL Approx. 15 animators trained Approx. 4,500 people reached through awareness creation per year.	
Way of monitoring	How	Training records
	When	Annually
	By who	Research/Monitoring Coordinator

No	6	
Indicator	Quantitative employment and income generation	
Mitigation measure	N.A.	
<i>Repeat for each parameter</i>		
Chosen parameter	Number of people receiving income from project activity.	
Current situation of parameter	N.A.	
Estimation of baseline situation of parameter	N.A.	
Future target for parameter	Project will provide employment to approximately 75 persons: <ul style="list-style-type: none"> - Approx. 15 staff (project manager, loaning and saving head, training coordinator and environmental expert) - Approx. 5 artisan per community for 12 communities (totaling 60) 	

GOLD STANDARD PASSPORT

Way of monitoring	How	Employment records and financial records
	When	Annually
	By who	Monitoring/Research Coordinator

Additional remarks monitoring

SECTION H. **Additionality and conservativeness**



This section is only applicable if the section on additionality and/or your choice of baseline does not follow Gold Standard guidance

H.1. **Additionality**

N.A.

GOLD STANDARD PASSPORT

GOLD STANDARD PASSPORT

H.2. Conservativeness

<p>[See Toolkit 2.2]</p>

<p>N.A.</p>

GOLD STANDARD PASSPORT

ANNEX 1 ODA declaration

Tembea Youth Centre for Sustainable Development



Office: Off Kisumu - Busia Highway, UGUNJA MARKET CENTRE

P.O. Box 313 - 40606

UGUNJA, KENYA

Cell: +254 722588675 / 727 649 967

Email: tembea@tembeayouth.org

Our Ref: TYCSD/MC/10/012

Ugunja, 10 October 2011

Project: GS 879 Energy Efficient Cook Stoves for Siaya Communities, Kenya

To: Gold Standard Foundation

Declaration of Non-Use of Official Development Assistance by Project Owner

Tembea Youth Center for Sustainable Development

As Project Owner of the above-referenced project, acting on behalf of all project participants, I now make the following representations:

Mr. Jared Buoga Omondi

I hereby declare that I am duly and fully authorised by the project owner of the above-referenced project, acting on behalf of all project participants, to make the following representations on Project Proponent's behalf:

I. Gold Standard Documentation

I am familiar with the provisions of Gold Standard Documentation relevant to Official Development Assistance (ODA). I understand that the above-referenced project is not eligible for Gold Standard registration if the project receives or benefits from Official Development Assistance under the condition that some or all credits coming out of the project are transferred to the ODA donor country. I now expressly declare that no financing provided in connection with the above-referenced project has come from or will come from ODA that has been or will be provided under the condition, whether express or implied, that any or all of the credits [CERs, ERUs or VERs] issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

II. Duty to Notify Upon Discovery.

If I learn or if I am given any reason to believe at any stage of project design or implementation that ODA has been used to support the development or implementation of the project, or that an entity providing ODA to the host country may at some point in the future benefit directly or indirectly from the credits generated from the project as a condition of investment, I will make this known to the Gold Standard immediately.

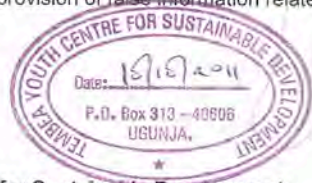
III. Sanctions. I am fully aware that under Section 10 of the Gold Standard Terms and Conditions sanctions and damages may be incurred for the provision of false information related to Projects and/or Gold Standard credits.

Signed:

Name: Mr. Jared Buoga Omondi

Title: Director

On behalf of: Tembea Youth Center for Sustainable Development



Community Empowerment, Environmental Stewardship and Sustainability
www.tembeayouth.org